Amendments to the Specification:

Please replace paragraph [0036] with the following amended paragraph.

[0036] Referring now to specific aspects of the software architecture of ~~an~~ operating program 60, operating program 60 includes an ~~instructions~~ instruction section 62, and a parameter section 64. Further, instruction section 62 may include selectable routine section 62s. Instructions of instruction section 62 control the overall flow of operation of reader 10. Some instructions of instruction section 62 reference a parameter from a parameter table of parameter section 64. An instruction of instruction section 62 may state in pseudocode, for example, "Set illumination to level determined by [value in parameter row x]." When executing such an instruction of instruction section 62, control circuit 40 may read the value of parameter row 64x. An instruction of instruction section 62 may also cause to be executed a selectable routine that is selected depending on the status of a parameter value of parameter section 64. For example, if the application program is a bar code decoding algorithm then an instruction of instruction section 62 may ~~sate~~ state in pseudocode, for example, "Launch Maxicode decoding if Maxicode parameter of parameter row 64y is set to "on." When executing such an instruction, control circuit 40 polls the contents of row 64y of parameter section 64 to determine whether to execute the routine called for by the instruction. If the parameter value indicates that the selectable routine is activated, control circuit 40, executes the appropriate instructions of routine instruction section 62s to execute the instruction routine.

Please replace paragraph [0038] with the following amended paragraph.

[0038] Another architecture typical of an optical reader is shown in Fig. 3c. Reader 10c includes processor system 40s1, and an integrated host processor system 40s2 which includes host processor 40hp and an associated memory 45-2. "Host processor system" herein shall refer to any processor system which stores a reader application operating program for transmission into a processor system controlling operation of a reader imaging system 33 or

which exercises supervisory control over a processor system controlling operation of a reader imaging system 33, or which stores in ~~it's~~ its associated memory more than one application operating program that is immediately executable on reception of a command of a user. In a reader having two processors such as processor 42 and processor 40hp, processor 42 is typically dedicated to process an image data to decode decodable indicia, whereas processor 40hp is devoted to instructing processor 42 to execute decoding operations, receiving inputs from trigger 13t and keyboard 13k, coordinating display and other types of output by output devices 14d, 14g, and 14a and controlling transmissions of data between various processor systems.

Please replace paragraph [0040] with the following amended paragraph.

[0040] Referring to further aspects of readers 10a, 10b, and 10c at least one I/O interface e.g. interface 37-1, 37-2, and 37-3 facilitates local "wired" digital communication such as RS-232, Ethernet, serial bus including Universal Serial Bus (USB), or local wireless communication technology including "Blue Tooth" communication technology. At least one I/O interface, e.g. interface 37-3, meanwhile, facilitates digital communication with remote processor system 41-1 in one of available remote communication technologies including dial-up, ISDN, DSL, cellular or other RF, and cable. Remote processor assembly 88-1 may be part of a network 88N of processor systems as suggested by assemblies 88-2, 88-3, and 88-4 links 88L and hub 88H e.g. a personal computer or main frame computer connected to a network, or a computer that is in communication with reader 10c only and is not part of a network. The network 88N to which system 88-1 belongs may be part of the internet. Further, assembly 88-1 may be a server of the network and may incorporate web pages for viewing by the remaining processor assemblies of the network. In addition to being in communication with reader 10c, system 88-1 may be in communication with a plurality of additional readers 10' and 10." Reader 10c may be part of a local area network (LAN). Reader 10 may communicate with system 88-1 via an I/O interface associated with system 88-1 or via an I/O interface 88I of network 88N such as a bridge or router. While the components of readers 10a, 10b, and 10c are represented in Figs. 3a-3c as ~~discreet~~ discrete

elements it is understood that integration technologies have made it possible to form numerous circuit components on a single integrated circuit chip. For example, with present fabrication technologies, it is common to form components such as components 42, 40, 46-1, 47-1, 37-2, and 37-1 on a single piece of silicone.

Please replace paragraph [0044] with the following amended paragraph

[0044] As described in U.S. Patent No. 5,965,863, incorporated herein by reference, one function typically provided by nonintegrated local host processor system 70s is to create operating programs for downloading into reader 10. Processor system 70s typically has an operating system incorporated therein, such as WINDOWS, which enables an operator to develop operating programs using a graphical user interface. Nonintegrated local processor system 70s also can be configured to receive messages an/or image data from more than one reader, possibly in a keyboard wedge configuration ~~as described~~ as described in U.S. Patent No. 6,161,760, incorporated herein by reference. It is also convenient to employ processor processing. For example a spreadsheet program can be incorporated in system 70s which is useful for analyzing data messages from reader 10e. An image processing application can be loaded into system 70s which is useful for editing, storing, or viewing electronic images received from reader 10e. It is also convenient to configure reader 10e to coordinate communication of data to and from remote processor assembly 88-1. Accordingly processor assembly 68 typically includes I/O interface 74-2 which facilitates remote digital communication with a remote processor assembly, e.g. assembly 88-1 as shown in Fig. 3c.

Please replace paragraph [0074] with the following amended paragraph.

[0074] It is seen from the above grey band positioning rules, that in general the grey band is established closer to the major peaks of an array of pixel values 210 when control circuit 40 selects a more ~~aggressing~~ aggressive peak sensing threshold as a digitizing threshold, unless average high and/or low peak values force another result. This general rule is based on the observation that the selection of a more aggressive peak sensing threshold normally

indicates that an array 210 comprises a higher signal-to-noise ratio. Wide grey band regions are appropriate for digitizing arrays having higher signal-to-noise ratios.

Please replace paragraph [0084] with the following amended paragraph.

[0084] Applying the grey ~~bound~~ band position determining rules using high peak shape characterizing data 430-3h, it is seen that the average high peak value (55%) is within the default boundary corresponding to Rule C (87.25%). Accordingly, the upper grey band boundary is determined to be 55%. Applying the grey ~~bound~~ band position determining rules using the low peak shape characterizing data 430-3l, it is seen that average low peak value (27%) is within the default boundary corresponding to Rule D of the grey band positioning rules (6.25%). Accordingly, the low grey band is determined to be 27%. It is seen that operation of the grey band positioning rules operate to bias the grey band toward min tracking line 213-5 in the case of an overgrown symbol.

Please replace paragraph [0085] with the following amended paragraph.

[0085] Figs. 12a-12c illustrate application of the invention for decoding of an "undercut" symbol. "Undercut" symbols are characterized, in general, by wide ~~bars~~ spaces and narrow ~~spaces~~ bars. An image representation of an undercut Code 128 symbol is shown in Fig. 12a. An array of pixel values 210-6 corresponding to slice section 423 of the image representation of Fig. 12a is shown in Fig. 12b. Peak characterizing data 430-4 corresponding to array 210-6 including high peak shape characterizing data 430-4h and low peak characterizing data 430-4l are shown in Fig. 12c.

Please replace paragraph [0087] with the following amended paragraph.

[0087] Applying the grey ~~bound~~ band position determining rules using high peak shape characterizing data 430-4h, it is seen that the average high peak value (82%) is within the default boundary corresponding to Rule D (92.75%). Accordingly, the upper grey band

boundary is determined to be 82%. Applying the grey ~~bound~~ band position determining rules using the low peak shape characterizing data 430-4l, it is seen that average low peak value (32%) is within the default boundary corresponding to Rule C of the grey band positioning rules (6.25%). Accordingly, the low grey band is determined to be 32%. It is seen that operation of the grey band positioning rules operate to bias the grey band toward max peak tracking line 212-6 in the case of an undercut symbol. This is a useful result since minor peaks attributable to a symbol transition are ~~exceptioned~~ expected to be found toward max peak tracking line 212-6 in the case of an undercut symbol.